

# TS-209 Pro

## Turbo Station

**QNAP**  
www.qnap.com

# All-in-one NAS Server

## for Business Users

*Are you looking for the most ideal NAS for your office? QNAP's brand new powerful 2-bay model, TS-209 Pro, accomplishes your business needs!!!*

### Outstanding Performance with the Most Complete Business Server Features You Need

- 500MHz Powerful CPU with 128MB DDRII and Gigabit LAN Interface
- Ultra-high-speed Download/ Upload Performance
- Encrypted FTP, File Server with Web File Manager, SSL Secure Login, SSH Remote Login, and Windows AD Service are Supported!!!

### Share Files across Windows, Mac, Linux and Unix

- Multiple File Sharing Protocols (SMB/CIFS, AFP, NFS) are Supported

### Most Advanced Backup Solution

- Auto-sync/ Instant/ Schedule Backup (Professional Backup Software, NetBak Replicator Included!)
- Encrypted Remote Replication

### Best Choice to Set up Your Own Web Server

- PHP with MySQL and SQLite Dual Support
- Built-in DDNS Support

### RAID-1 Mirroring with Hot-swapping

- Unique Hot-swapping Design in 2-bay Storage in the Market Providing the Enterprise-class Data Protection and Non-stop Service

### Support 2-Bay Hard Disk Drive

- Supports Two 3.5" SATA Drives up to 2TB Large Storage Capacity



### Abundant Business Server Features

- |                  |                      |                |
|------------------|----------------------|----------------|
| • File Server    | • Web Server         | • FTP Server   |
| • Backup Server  | • Mirror Station     | • MySQL Server |
| • Printer Server | • Remote Replication | • and More...  |



# All-in-one NAS Server

TS-209 Pro Turbo Station

2-Bay • RAID 1 • Hot-swappable



## Overview

Modern business needs a reliable network storage system for centralized file sharing, network printer sharing, FTP upload/download, and data backup, etc.. To store, back up, manage, and share these digital assets and outputs appropriately have become increasingly essential. However, it is a challenging job for most small business and SOHO users due to the lack of resources and professional IT staff. Now, QNAP TS-209 Pro Turbo Station offers the most ideal solution to accomplish all these needs.

QNAP TS-209 Pro Turbo Station is a 2-bay, hot-swappable All-in-one NAS (Network Attached Storage) Server supporting up to 2TB storage capacity and abundant valuable server functions. Adopting the latest powerful 500MHz CPU with 128MB DDR II RAM and Gigabit Ethernet design, TS-209 Pro's ultra-high-speed performance significantly boosts the file sharing speed and makes it a perfect choice for business users who need faster performance and useful server features. With the friendly web-based interface, users can easily set up a network system for all sorts of server applications without MIS help.

TS-209 Pro supports multiple file sharing protocols for business users to share files across Linux, Unix, Mac, and Windows platforms. Many valuable server functions including File Server, FTP Server, and Printer Server, etc., are supported to satisfy the business needs. Meanwhile, Windows ADS (Active Directory Service) is supported to help create an easy-to-access

environment and lower the maintenance cost by centralized management. With the dual support of MySQL and SQLite, SMB & SOHO users can easily set up their own web and database servers flexibly.

Advanced RAID-1 mirroring with hot-swapping design, which is unique in 2-bay storage in the market, provides enterprise-class data protection and non-stop service. In case of drive failure, the hard disk drive can be replaced immediately without turning off the server and the data can be rebuilt by RAID auto-rebuilding.

TS-209 Pro provides the most complete backup solution for secure data protection with the professional backup software: NetBak Replicator. Users can select Auto-Sync/ Instant/ Schedule backup modes to back up the data on multiple Window PCs. The encrypted Remote Replication and RAID 1 disk mirroring ensures exclusive data protection.

TS-209 Pro supports various security mechanisms for data storage and management. The FTP Server enables data transfer and sharing over SSL/ TLS (explicit) encryption. The server can be accessed by remote login by SSH connection and browser-based SSL login. Users can access, store and share data securely.

## Versatile Functions for Small Business and SOHO

### Applications for Small Business and SOHO



### Your Data Center for File Sharing and Storage



#### File Server

The basic purpose of File Server is to allow users to store and share files. Users often concern that their private data or confidential files would be accessed by others. TS-209 Pro professional server allows server manager to create user ID and password, and define the authority and quota for each user. Thus personal data stored on TS-209 Pro are well protected.



#### FTP Server

Having troubles with sending large files by e-mail due to the limited capacity? You can establish your own FTP server by using TS-209 Pro. You can manage the access authority of the FTP server and share your files with your friends or customers easily in a few steps.



#### Sharing files across Windows, Mac, Linux, and Unix

TS-209 Pro is specially designed for different users to share the files across Windows, Mac, Linux, and UNIX environment.



#### Support Windows ADS

With Windows ADS (Active Directory Service) support, you can deploy your Turbo Station in small business environment easily! It enables Windows domain users to easily access the shared data with the Active Directory authentication. This not only saves server manager's time and effort in creating duplicated groups and accounts, but also lowers the maintenance cost by centralized management.



#### Ultra-high-speed Performance

TS-209 Pro adopts the latest powerful Marvell 5182 CPU and large-sized 128MB DDRII memory for extra high performance (the highest performance of its class) in uploading mass data to and downloading them from the server.



#### Web Server

Owning a web server is no more a dream! With the dual support of MySQL and SQLite, SMB/SOHO users can easily set up their own web server. With the editable php.ini support, there is no need of going through all the hassles of setting up a web server. You can either develop programs by yourself or download a variety of open-sourced applications, such as online shops, forums, blogs, etc., over the Internet.



## Complete Backup Solution



### Backup Server

Data backup may sound time-consuming and painful for most users. QNAP's Turbo Station now brings you the enterprise-class technology and make backup extremely simple and efficient! The most intelligent automatic backup software, NetBak Replicator, is provided for users to perform real-time synchronization or schedule backup from multiple PCs to TS-209 Pro. Enterprise users can also use their existing backup software (e.g. Arconics True Image, CA BrightStor ARCserve Backup, EMC Retrospect, etc.) to back up their important data to TS-209 Pro.



### Remote Replication

Remote Replication provides a superior level of data redundancy. Effectively, Qnap Remote Replication is the most affordable way in the industry for data disaster recovery. Files can be backed up from TS-209 Pro to other QNAP NAS products in remote locations with or without encryption. Other advanced options such as data compression, block level incremental backup, and data synchronization save tremendous bandwidth and time for data backup.

## RAID-1 Mirroring with Hot-swap Design



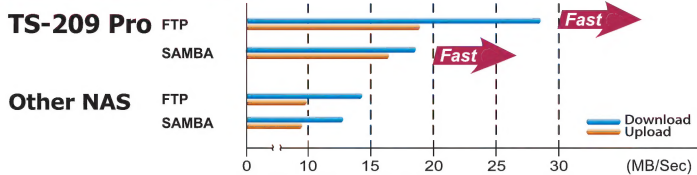
Imagine, hard drive crashes and you lose everything. What would you do to have the data back? TS-209 Pro supports RAID 1 Mirroring for non-stop service and easy maintenance. When data crash occurs, the administrator can be alerted by e-mail alarm and LED indication.

The hard disk drive can be replaced by hot swapping without turning off the server.

The intelligent data rebuilding capability allows users to replace a failed drive by hot-swap. This enables automatic data rebuilding to the new drive without suffering from any system downtime.

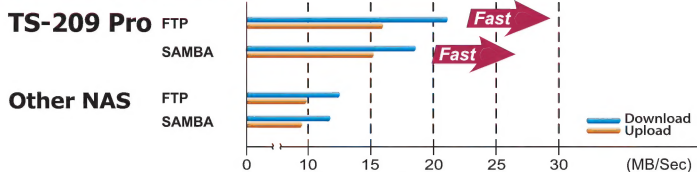
## Ultra-high-speed Performance

### RAID 0 (Disk Striping)



FTP/SAMBA Testing Environment:  
Intel® Core™2 Duo E6600 2.4G/ 1G RAM, Windows Vista Ultimate, ZyXEL Gigabit Switch  
FTP/SAMBA Testing Method:  
Connect TS-209 Pro and PC to switch, upload/download 1GB File without Jumbo Frame, FTP Tool: FileZilla

### RAID 1 (Disk Mirroring)



FTP/SAMBA Testing Environment:  
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### Printer Server

You can share your printer device over the network without duplicating investment by simply connecting a USB printer to TS-209 Pro USB port and enabling the printer sharing function.

## Outstanding Design with Good System Tools



Excellent mechanical design by HDD bracket to make wind tunnel effect. HDD heat dissipation through the channel efficiently.



- Low power consumption SoC system chip (System: 25.2W)
- Smart hard disk sleep function, efficient heat dissipation design
- TS-209 series can run 24x7, 365 days for all applications and keep HDD temperature under 50°C



### Unique HHS (Bad Block Scanning and Disk Checking)

Do you have any idea about the health status of your hard disk drives? TS-209 Pro is embedded with HHS (HDD Health Scanning) technology which supports disk checking and bad blocks scanning to prevent potential data loss.

## Store, Access and Share Your Data Securely



- **Personal data stored on TS-209 Pro is well protected**  
Server manager can create user ID and password, and define the authority and quota of each user.
- **Easy IP filter control Users can allow or deny specified IP connections to TS-209 Pro.**
- **SSL Security (HTTPS)**  
Users can access and manage TS-209 Pro by using web browser securely.
- **Remote login your TS-209 Pro by SSH (secure shell) or Telnet connection.**
- **Secure FTP**  
Share and transmit your data over SSL/TLS (explicit) encryption.
- **Support passive mode FTP port range setup.**
- **Smart FTP policy control**  
Maximum number of all FTP connections or a single account can be configured.
- **Encrypted remote replication**  
Data on TS-209 Pro can be backed up to another TS-109, TS-209 series over Internet securely.



### Delete the wrong file? Don't worry!!!

Can you imagine if you delete an important file on the NAS by mistake and lose it forever? You don't need to worry now! The files deleted from the network shares of the TS-209 Pro will be moved to a particular recycle bin folder. You can restore your data anytime in case of unintended file deletion.

## Back up and Share Your Digital Contents



### UPnP Media Streaming Server (with built-in TwonkyMedia Server!!!)

TS-209 Pro is a perfect media storage center and it works well with DLNA (Digital Living Network Alliance) compliant media players.



### Image Files Backup

Now you can share photos or image file with your customers by TS-209 Pro. The server automatically generates a web-based photo album with thumbnails and details, such as date, resolution, focal length, aperture, etc. You can browse, share, and backup all the digital images in a convenient way!

## Easy Installation



The setting of TS-209 Pro can be easily accomplished by QNAP Finder. Also, QNAP offers the Quick Start Guide (Multi-language) inside the CD, users can have a quick overview before installation!



**Intelligent One Touch Auto Copy**  
When USB device is installed, simply press the copy button and all USB data can be copied to TS-209 Pro independent of PC.

## Hardware Specifications

### Processor

- SoC 500MHz

### Memory

- 128MB DDRII RAM, 8MB Flash

### HDD Capacity

- 2 x 3.5" SATA I/II HDD, up to 2 TB  
(the HDD is not included)

### LAN Port

- 1 x Gigabit RJ-45 Ethernet port

### LED Indicator

- USB, Status, HDD1, HDD2, LAN, Power

### USB

- 3 x USB 2.0, support USB printer, disk, digital camera, pen drive, card reader, USB hub

### Buttons

- Intelligent USB auto copy button
- Power button
- Reset button

### Alarm Buzzer

- System warning

### Form Factor

- Compact cubic type

### Dimension

- 214(D) x 175(W) x 115(H) mm

### Weight

- Net weight: 2.4Kg
- Gross weight: 3.5Kg

### Operation Environment

- Temperature 0~35°C
- Humidity 0~95% R.H

### Power Supply

- External power adapter, 60W, 100~240V

### Thermal Solution

- Smart fan

### Secure Design

- K-Lock security slot for theft prevention

## Powerful All-in-one Server

### File server

- Share files across Windows/ Mac/ Linux/ Unix and centralized management

### FTP server

- Access file from remote location via FTP server; supports up to 32 concurrent connections; FTP with SSL/TLS(Explicit) mode; passive FTP port range control

### Backup server

- Client-side backup software-NetBak Replicator supports instant, schedule and real time backup
- 3rd party backup software support: Arconics True Image, CA BrightStor ARCserve Backup, EMC Retrospect

### Mirror station

- Protect data by RAID 1 technology, support RAID auto rebuilding

### Print server

- Network printer sharing via USB (Support Windows platform only)

### Disaster Recovery

- Block level remote replication supports instant and schedule backup management; support synchronization mode

### Web Server

- Establish users' own web page and interactive websites with editable PHP.ini; SQLite and MySQL dual support

### MySQL Server

- Support MySQL database server

### UPnP MediaServer

- Support UPnP/ DLNA multimedia technology; Watch stored photos and

home videos on TV, listen to music on Hi-Fi system via DMP

- Enjoy more than hundreds of worldwide Internet radio (TwonkyMedia)

### iTunes Server

- Act as an iTunes server on your network, and you can play all your music files by iTunes software on your PC/NB.

### Multimedia Station

- Image Slide show, Rotate (+90°, -90°)
- Showing photo's details: dates, exposure time, aperture, etc
- Auto generating thumbnails for easy browsing
- Photo album access authority management
- Multimedia (video, audio) file local play
- Automatic file categorization

### Download Station

- Support BitTorrent/ FTP/ HTTP Download (without PC)
- Unique remote control software: QGet (Windows-based application), allows you to control multiple Turbo Stations on one PC.
- BitTorrent download supports DHT
- Download task management (Automatic relaying if interrupted)
- Download configuration (Current seed number, configurable port range, bandwidth control, download percentage, UPnP NAT port forwarding for BitTorrent download)

## Software Specifications

### Operation System

- Linux embedded system

### Networking

- TCP/IP, DHCP Client, DHCP Server, CIFS/SMB, AFP, NFS, HTTP, HTTPS, FTP, DDNS, NTP, Gigabit Jumbo Frame

### File System

- EXT3 (Internal/external HDD)
- FAT (External HDD)
- NTFS (External HDD, read only)

### Supported Clients

- Microsoft® Windows® 98/ ME/ NT/ 2000/ XP/ 2003/ Vista
- Mac OSX
- Linux and Unix

### Disk Management

- User quota management (Per user)
- Single disk, RAID 0 (Disk Stripping), RAID 1 (Disk Mirroring), JBOD (Disk Volume)
- Disk usage status
- Check disk (Check Linux file system)
- Bad blocks scan

### User Management

- Windows AD service support
- User account management (max 256 users)
- User group management (max 128 groups)

### File System Management

- Network share management

(max 256 shares)

- Share folder level ACL support
- Unicode support
- Journaling file system
- Unique Web File Manager

### System Tools

- E-mail alert (support SMTP authentication)
- HDD standby mode setting
- Disk usage alert
- Auto power on after power loss
- System firmware upgrade
- Change homepage Logo
- Backup, Restore, Reset system setting
- Network recycle bin
- Configurable management port
- Easy IP filter management
- Secure remote login by SSH connection; remote login by Telnet connection
- UPS Support

### Event Log

- Display system log/alert/error

### Multi Language

- English, Traditional Chinese, Simplified Chinese, Japanese, Korean, French, German, Italian, Spanish, Russian

### Backup Management

- PC client backup software-NetBak Replicator: Instant/ Schedule/ Auto-sync backup
- Encrypted Remote Replication
- RAID 1 Mirroring

## Package Contents



TS-209 Turbo Station



Adaptor



Power cord



CD-ROM



Quick Installation Guide



Flat head screws x 4



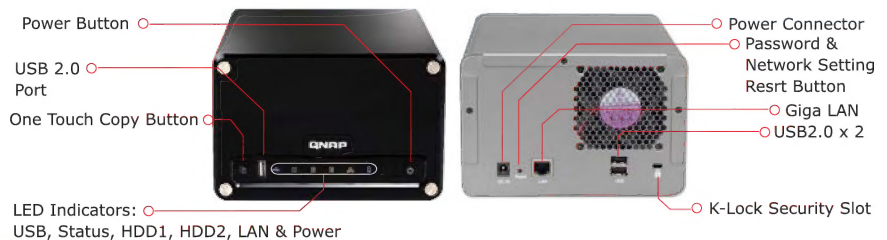
Ethernet cable



Front panel



Flat head screws x 8



## QNAP Systems, Inc.

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